REMARKS

Claims 1-40 are all the claims pending in the application.

Claims 1-3 and 21-23 are rejected under 35 U.S.C. 102(e) as being Baker anticipated by (U.S. Patent No. 6,122,613).

Claims 4-5, 7 and 10-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker in view of Kwoh et al. (U.S. Patent No. 5,502,694), hereinafter references as Kwoh.

Claims 6, 20, 26 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker in view of Kwoh as applied to claim 4 above, and further in Blum (U.S. Patent No. 4,663,678).

Claims 8-9, 12, 14, 16-19, 28-29, 32, 34 and 36-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker in view of Kwoh as applied to claim 10 above, and further in view of well known prior art.

The Applicant traverses the rejections and requests reconsideration.

Disclosure of Baker

Baker discloses techniques related to speech recognition. He suggests using multiplicity of speech recognition engines with complementing characters to effectively get an end result, which is a high quality recognition or transcript. Baker discloses a real-time speech recognizer which would recognize and display the text on the fly while the speaker is dictating. This would help the speaker to correct the recognition right there if needed.

Baker also suggests an off-line speech recognizer which will have a huge library of vocabulary and though will take little more time to recognize, but will recognize with higher accuracy percentage.

Both these recognition are assigned certain scores based on the confidence of recognition. When these recognitions are given to the transcription table, the transcriptionist will have the choice of choosing the right recognitions and hence, the end result will be high quality transcripts.

For Baker's recognition to work, a digital device with Microprocessor, RAM, I/O devices are required. The dictation is captured only for recognition purposes. These dictations are stored as digital packets/files.

Unlike in the present invention, Baker does not disclose (or suggest) simultaneous recording or correlation between two mediums.

Rejection of claims 1-3 and 21-23 are rejected under 35 U.S.C 102(e) as being anticipated by Baker

The Examiner cites 5:7-13, 4:55-65 and 9:42-51 for alleged support of the three steps and 4:61-65 with 6:51-58 and 7:50-60 for alleged support of the wherein clause.

However, in 5:7-13 Baker asserts

> "In contrast to real-time systems, an "offline" system typically does not recognize speech on a real-time basis but rather, due to processing speed constraints, requires a greater amount of time to perform speech recognition. An example of offline dictation is when the speaker's words are recorded, either by a tape recorder or by a human stenographer, and then typed by a human Transcriptionist at a later time."

In 4:55-65 of Baker, it is asserted:

> "Referring to Fig.10 when a speech recognition system is used for dictation, the speech recognition system serves as an alternative to other input mechanisms such as a keyboard. A user who is unable or who does not like to type on the keyboard nonetheless may create a written document by orally dictating the text into the microphone of a speech recognition system. In a real-time recognition system, the speaker's words are, from the speaker's perspective, recognized and the corresponding text is displayed on a computer display screen essentially at the same time as the words are spoken.

Baker discloses devices that aid speech recognition. He describes a real-time recognition where the speed of recognition is higher, and an offline recognition where the accuracy is higher.

In the end a transcription of dictated information is achieved which is a cumulative advantage of both the systems. (Baker 3:26-45)

To do speech recognition, the dictation has to be recorded on Digital medium, where the program stored in a PC can do recognition. So both the "Real-time" and "off-line" recording and recognition have to be done on Digital medium.

On the other hand, in the present invention, recording dictation information is done on an analog medium while it is simultaneously recorded onto the digital medium in real-time, and changes done on any one medium is simultaneously reflected on the other medium.

Baker does not teach simultaneous recording, and changes in one medium being reflected on the other. Moreover, Baker does not teach changes in the Audio file, but he

only states the changes being made onto the "recognized text" on real time basis. (4:65 - 5:5)

Regarding claims 2 and 22, Baker quotes magnetic tape as medium only on offline methods. For Baker's teachings to be put in use, these magnetic medium recording has to be fed to a digital medium for the recognition to take place. Whereas in the present invention, the primary medium is an analog medium where dictations are recorded onto along with unique identifier. While recording and manipulation of voice is happening in the analog medium, exact replications are also made in Digital medium.

Regarding claims 3 and 23, Baker's invention is only for transcription and speech recognition, whereas the present invention can be applied in any application where correlation is required between Analog and Digital mediums.

Rejection of claims 4-5, 7 and 10-19 based on Baker and Kwoh

The Examiner admits that Baker does not suggest splicing dictation information into time elements and assigning a unique identifier to each time element. However, Kwoh allegedly overcomes this deficiency.

Kwoh clearly states that "Text data" is "arranged" into groups and each group is assigned a code. This code is again an ASCII character; so instead of transmitting a whole word, a code or symbol is transmitted and hence, data compression and synchronism within the same media is achieved.

In the present invention, dictation is recorded as such on a time continuous analog medium. This is not "Text data", but the analog voice itself. This analog information is virtually

spliced into preset time intervals (100 ms), and each splice of Analog signal is represented by a unique identifier. Hence, both the analog signal and the identifiers are unique, unlike Kwoh where the words need not be unique. Synchronization is achieved only because this unique identifier is simultaneously written on both analog and digital medium in decodable formats along with the dictation information in the medium's native representation. Emphasis is given on recording the dictation information in the medium's native format.

Kwoh does not suggest splicing the Analog voice in time intervals, but grouping the words prior to recording.

Regarding claims 5 and 25, though Kwoh teaches using two channels, neither Kwoh nor Baker teaches the identifiers being recorded on two independent devices/mediums and which can be further used for correlation and synchronization. In Kwoh's method recording onto tape and playing the tape to be decoded by the digital device later are two independent processes.

In Baker's method feeding the voice input to the computer/device and getting out Text is the process. Even if voice is recorded onto tape, that has to be played back and fed to the computer/device for it to recognize the speech. **So neither Kwoh nor Baker teaches any correlation or synchronization between mediums**.

Regarding claims 7 and 27, though Kwoh teaches using codes or symbols to represent Words or groups of words, neither Kwoh nor Baker teach using unique identifiers to represent time elements of an analog tape. Moreover, none of them teach feeding this unique identifier to the digital device/Computer simultaneously while being recorded onto the tape.

Further, present invention requires using separate switching event identifier, (different from unique identifiers) to convey the switching operations as Play, Record, Fast Forward, Rewind, Save etc. These operations when being carried out on the tape device in the front end, will be taken to the computer via these Switching function identifiers.

Neither Kwoh nor Baker deal with this kind of identifiers, because there were no two simultaneous devices which need to be informed about the operation. There were no two devices and hence, no correlation and synchronization required between them.

Regarding claims 10 and 30, Baker's invention area is speech recognition, and while utterances are fed to the computer, the speech is recognized and displayed. The speaker can view on-line of what is being recognized, and can make necessary changes to the recognized Text, if he finds error. This is what Baker discloses as real-time speech recognition.

Again this speech which is being delivered can also be fed to a High accuracy speech recognition engine. For any particular utterance the score for that utterance is given. Both the recognizers give different scores. Later on a human Transcriptionist can refer to these scores and make a choice and prepare a document or a document can be prepared with choice of higher scores automatically. These are called off-line recognition and off-line transcription.

Baker discloses, while the Transcriptionist is doing off-line transcription, he has the option to listen to the digitized Speech sample. Baker does not use tape as a primary medium and does not use another medium where the analog voice has to be synchronously recorded in real time.

Kwoh uses tape as the primary medium but does not do real time recording, does not do synchronous recording in two mediums.

And hence, neither Baker nor Kwoh teach using switching functions and use of switching function identifiers.

Regarding claims 11 and 31, though Kwoh teaches recording information on a magnetic tape using two channels, one for Audio program and the other for Codes. Kwoh's codes are symbolic representations of words and these codes had to be finalized before recording onto the tape. These codes are representations of the word and are not representing the time element of the analog voice. Moreover these codes are not generated on the fly in real-time basis and are not simultaneously fed to the computer.

In the present invention when record function is encountered, Unique identifiers, that are representing unique time elements of the analog voice are generated on the fly in real-time basis and are also simultaneously fed to the computer.

Regarding claims 15 and 35, Kwoh teaches recording information onto tape medium, but in Kwoh, there is no real-time recording and real-time generation of identifiers and real-time synchronous recording on two mediums.

In the present invention when overwrite dictate is performed, new identifiers are recorded on the fly and simultaneously onto both the mediums.

Neither Kwoh, nor Baker teaches simultaneous real-time recording, where Overwrite dictate will need new unique identifiers.

Rejection of claims 6, 20, 26 and 40 over Baker, Kwoh and Blum

Regarding claims 6 and 26 and claims 20 and 40, Blum suggests writing digital time code information interspersed in the same track as the Audio message, thereby saving additional tracks for time codes in multi track message logging system.

Blum is not bothered about generating unique identifiers, rather he generates time codes, which is done with the help of a Time code processor chip. The time code processor takes care of the generation of bit patterns to represent Month, Day, Hour and Minute. Blum uses a variable clock frequency to read data from the tape.

On the other hand, in the present invention, a unique identifier is generated with variable bit length and selectable granularity from 50-800ms. It is also claimed that these are kept variable to accommodate different types of mediums and synchronization between them.

The present invention uses a train of pulses, feeding the counter, adding a start bit and amplifying and writing onto the tape and the computer. The clock signal used for generating the identifier is typically used to read the identifier back. Any digital data written onto tapes will have 0-1 and 1-0 transitions, and will deploy shift registers and removal of start bit mechanisms.

But the present invention has a unique way of generating the said identifiers with varying bit length and frequency, which could be used to tag different data in variety of mediums. The present invention is not limited to the time-code way of generation or reading back using standard Time-code processor chips. The present invention's uniqueness rests in the way of generating train of pulses, feeding the counter which outputs the identifier bits at preferred granularity, adding a Start bit and applying the result to an amplifier and to the tape medium. If

it is digital medium, before sending the identifier to the amplifier, it is sent to the Transmitter/receiver portion to process as communication port signal.

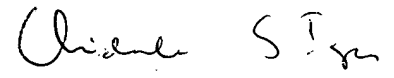
Rejection of claims 8-9, 12, 14, 16-19, 28-29, 32, 34 and 36-39 based on Baker, Kwoh and "well-known" prior art

The above claims are dependant on the above discussed base claims. They are patentable at least by virtue of their dependence.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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